

# Installation Instructions

## PHOTOSWITCH<sup>®</sup> Bulletin 42KF

**IMPORTANT: SAVE THESE INSTRUCTIONS FOR FUTURE USE.**

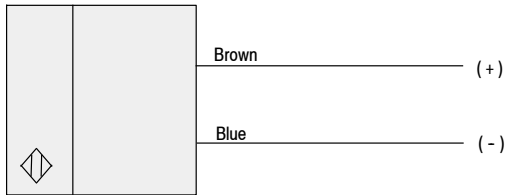
|    | Sensors                  | Transmitted Beam   | Diffuse                                |
|----|--------------------------|--|--|
| 1  | 3m Cable/with 2m Coated  | 42KF-T1JNTN-A3*  | 42KF-D1KNTH-A3                         |
| 2  | Sensing Distance         | 3m (119 inch)  | 30cm (12 inch)                         |
| 3  | Field of View            | 10° Receiver   | --                                     |
| 4  | Sensitivity Adjustment   | With External Accessory Module   |  |
| 5  | Transmitting LED         | Infrared LED (880nm)   |  |
| 6  | Indication               | Trans: Power (Red LED)<br>Rcvr: Output (Red LED)<br>Stable (Green LED) | Output (Red LED)<br>Stable (Green LED) |
| 7  | Supply Voltage           | 12-24V DC $\pm$ 10% (Class 2 source required)                          |  |
| 8  | Max Current Consumption  | 12mA: Emitter, 15mA: Rcvr, 10mA: Sense Module                          | 20mA: Sensor, 10mA: Sense Module       |
| 9  | Output/Type              | NPN Standard, PNP**  |  |
|    |                          | DO Standard  | LO Standard                            |
| 10 | Max Load Current         | 100mA  |  |
| 11 | Hysteresis               | --   | 10% (Max)                              |
| 12 | Response Time            | 350 $\mu$ s, 650 $\mu$ s **  |  |
| 13 | Operating Temperature    | -25°C to +55°C (-13°F to +131°F)                                       |  |
| 14 | Relative Humidity        | 0% to 100%   |  |
| 15 | Coating Material         | PFA (Fluorine Resin)   |  |
| 16 | Environmental Protection | IP67, 1200psi (8270kPa) Washdown (up to 1m from sensor)                |  |
| 17 | Vibration                | 10-55 Hz, 1.5mm Amplitude 2hr. 3 Directions, 120 Excursions            |  |
| 18 | Shock                    | 30G, meets or exceeds IEC 60947-5-2                                    |  |
| 19 | Electrical Protection    | Short Circuit and Overload Protection                                  |  |
| 20 | Approvals                | UL listed, C-UL listed, CE marked for all applicable directives        |  |

\* 42KT-T1JNTN-A3 is shipped as a receiver/emitter pair (42KT-R1JNTN-A3/42KT-E1JNTN-A3)

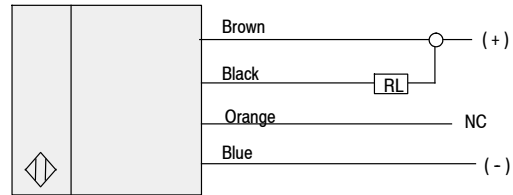
\*\* With optional sensitivity adjustment module accessory.

### Wiring

#### Transmitted Beam Source



#### Sensor without Sensitivity Adjustment Module



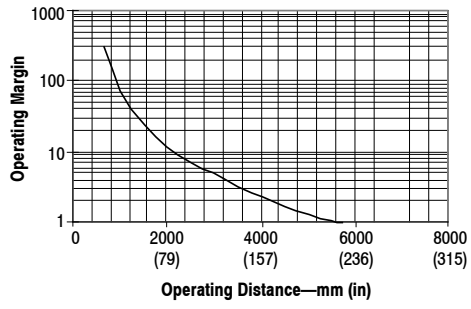
#### Sensor with Sensitivity Adjustment Module



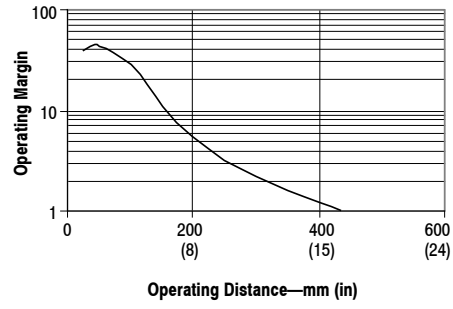


## Typical Response Curves

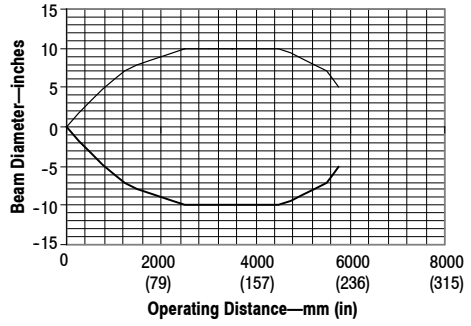
### Transmitted Beam



### Diffuse



### Transmitted Beam



### Diffuse

